In 1971, the NHVDL was dedicated in the memory of the late Dr. Robinson Smith who, as a lifelong resident of NH, made numerous contributions to the veterinary profession and NH agriculture. In 1921, Dr. Smith was appointed State Veterinarian and served as acting Commissioner until 1947. Under the program to eradicate Bovine Tuberculosis, NH became the first in the nation to be classified as Brucellosis-free by the USDA. To this day, NH maintains its Brucellosis free status and livestock in NH are tested at the NHVDL for routine surveillance.

The New Hampshire Veterinary Medical Association (NHVMA) was the primary proponent of the lab and was largely responsible for gaining legislative support and for aligning the New Hampshire Department of Agriculture and the University as cooperative entities relative to funding and supervision of NHVDL activities.

New Molecular Diagnostic Testing

After receiving equipment from the NH Department of Agriculture, Markets and Food, the NHVDL is developing real-time PCR molecular diagnostic testing protocols, which will be available to our clients in the very near future. These tests offer high sensitivity and rapid results reporting, with turn-around time as low as 24 hours, depending on volume of submissions.

Dr. Inga Sidor has lead the efforts for this new endeavor and the first test to be validated is for detection of Salmonella spp. bacteria in environmental swabs, feces or other tissues. An assay for Bovine Viral Diarrhea Virus (BVDV) will be available soon after, which can identify the virus in blood, serum, ear notches and other tissues. We would like to solicit input from our clients on what other tests would be of use in their practices; current considerations include Mycoplasma spp., Johne’s Disease, and tick-borne diseases.

For information or to provide suggestions, please contact the NHVDL (603-862-2726) or send Inga an email at inga.sidor@unh.edu.
Whether it be Rabies or round worms, Mad Cow Disease or bird flu, veterinary medicine has historically played a major role in public health. Agricultural food systems, the eradication of livestock diseases, vaccinations, meat inspection, biomedical research, wildlife disease and companion animal health are just a few examples where veterinary medicine has an influence. Since most of the newly emerging infectious diseases are zoonotic it is not surprising that collaborations in animal and human health continue to expand.

For over 40 years the NHVDL has been providing laboratory testing for the surveillance and diagnosis of infectious diseases.

The personal attention and familiarity with local veterinary professionals, who are on the frontlines of disease recognition, has allowed us to better respond to the diagnostic needs of our state.

In addition to the obvious zoonotic relationship with many vector borne diseases (EEE, WNV, Lymes) and foodborne illnesses (Salmonella, Campylobacter, E. coli 0157, Listeria, Yersinia and Vibrio) most of the bioterrorism threats recognized by the CDC and USDA are also associated with animals. Since 2003, the NHVDL has been a participating member of the NH Laboratory Response Network (LRN) as a sentinel lab for the early detection of bioterrorism agents. Some of the top ranked threats such as Anthrax, Tularemia, Plague and Brucellosis are all classic animal diseases.

With multi drug resistant (MDR) organisms becoming more common in veterinary medicine, the NHVDL continues to be diligent at monitoring for antibiotic resistance. Our microbiology lab has isolated Methicillin Resistant Staphylococcus aureus (MRSA) in cats, dogs, horses, pet birds and even a porcupine. In addition to the classic nosocomial transmission, anecdotal evidence suggests that many MRSA cases in pets are reverse-zoonotic “humanotic” with the owners infecting their pet.

NHVDL Distilling Alcohol

Partnered with the UNH Office of Environmental Health and Safety and the College of Life Sciences and Agriculture, the NHVDL purchased the CBG Biotech FormaSolve Recycler. This new unit has been used to recycle three solvents that are part of routine diagnostic processes in the laboratory:

- Alcohol
- Formalin
- Xylene Substitutes

The recycled products are then reused by personnel in the laboratory. And while the unit is capable of recycling xylene, the NHVDL has removed this chemical due to toxicity and safety concerns.

The rationale for making the financial investment in this device is three-fold: 1) to minimize the purchase of expensive virgin product; 2) to reduce the costs associated with hazardous waste disposal; and 3) to reduce the total volume of toxic material present in the laboratory. University officials expect to see an estimated savings of $6,500 per year with the use of the chemical recycler.

While supply is available, this effort will allow the NHVDL to offer formalin to local clinics and hospitals at no charge. If you would like a supply or have questions regarding the chemical minimization efforts, please call the NHVDL at 603-862-2726.

Robert Gibson, BS, MPH Microbiology Lab Supervisor

“Anecdotal evidence suggests that many MRSA cases in pets are reverse-zoonotic “humanotic” with the owners infecting their pet.”